EUROPEAN ECONOMIC HISTORY
BEFORE 1700

PART II: Old Exams and Chapters 5-6

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OLD EXAMS

Note:  1. Since the contents of the course have varied over time not all the old questions are still relevant. This will be discussed in the review sections.

2. This year the format of the exams may be somewhat different. Thus I intent to use some multiple choice questions instead of the short questions. This will be discussed in class.

Contents

First Midterm (a), 1995
First Midterm (b), 1995
Second Midterm (a), 1995
Second Midterm (b), 1995
Midterm, 1996
First Midterm (a), 1997
First Midterm (b), 1997

Final, 1995
Final, 1996
Final (a), 1997
Final (b), 1997
FIRST MIDTERM

SHORT ANSWER

1. (a) What (approximately) was the average age that women first married at in pre-industrial Western Europe? What was the average age in most of the rest of the world in the pre-industrial era? (4)

   (b) What was the average number of surviving children per woman in pre-industrial Western Europe? What was the average number of surviving children per woman in the rest of the world? (4)

   (c) Give three facts about marriage patterns in pre-industrial Europe that suggest that delaying marriage or not ever marrying was the result of individual choice. (6)

2. What was new about the carvel ship construction technique? (2)

LONG ANSWER

3. In 1377 the English king, Edward III, trying to raise money to pursue the 100 years war with France, imposed a poll tax on his subjects, which led to a major rebellion by the peasants. A poll tax is a tax levied as a fixed amount per person regardless of their income. Suppose the poll tax on each family amounted to 20% of the wage income of the family. Explain using the Malthusian model what would have happened to birth rates, death rates, wages and population had the poll tax been continued indefinitely. (17)

4. Explain why the obstacle to more rapid innovation in England before 1700 seems to have been a question of either cultural values or informal obstruction of entrepreneurs. Explain also why none of the explicit limitations on economic activity in pre-industrial Europe - usury laws, the doctrine of the just price, and the prohibition of work on Sundays and Saints days - would be likely to have much impact on the rate of technical progress. (17)
FIRST MIDTERM (MAKEUP)

SHORT ANSWER

1. (a) Why is the Japanese word for the button supposedly derived from Portuguese? (2)

   (b) When (roughly) was the windmill invented? What is its advantage compared to water power? (4)

   (c) When (roughly) was calculus discovered? (2)

2. Show in a diagram the effect of the Black Death on European living standards in the long run. (4)

LONG ANSWER

3. People have debated whether the European marriage pattern was the result of accident, social controls, or individual choice. Which view is most plausible? (19)

4. What is the evidence suggesting technology advanced relatively slowly in Europe before 1700? What is North and Thomas’s explanation for this. What are the theoretical and practical objections to their argument? (19)
SECOND MIDTERM

SHORT ANSWER

1. Explain (briefly) why the movement of grain prices between harvests can reveal the rate of return on capital. What is the implied rate of return from this source? (5)

2. Suppose that a listing of the ages of 100 army recruits in pre-industrial Europe showed the following age distribution.

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(a) What is the implied level of literacy? (3)

(b) Which of the following militias or armies could is this sample not likely to have come from:
- Parisian militia, 1750
- London militia, 1800
- Roman army, 0 AD (2)

3. Parish registers are a very important source of demographic information in pre-industrial Europe after 1540. There have been questions as to how carefully they were kept. How did Razzell calculate the percentage of deaths not recorded in the registers? (4)

LONG ANSWER

4. The Malthusian model predicts that living standards should not have increased in Europe between 1300 and 1700. What is the evidence that supports the Malthusian model in the case of England? What is the evidence that contradicts it? (18)

5. Grain yields were very low in medieval Europe. What is Postan’s explanation of the low yields? Why is this explanation problematic? Why might the rate of return on capital in medieval Europe explain low yields? (18)
SECOND MIDTERM

SHORT ANSWER

1. How is information on the dates of death of emperors used to determine the speed of travel within the Roman empire? (4)

2. When will the rate of return inferred from rent charges be different from that inferred from land sales? (4)

3. Explain how we can infer literacy rates in Ancient Rome from the surviving tombstones. (6)

LONG ANSWER

4. What is the Postan thesis? Why is it inconsistent with peasants in medieval Europe acting rationally? (18)

5. Explain how we can use the percentage of the population living in urban areas as a way of measuring living standards. What does it imply for Europe from 1500 to 1700? (18)
MIDTERM

SHORT ANSWER

1. Why does the fact that the population of Italy around 0 AD was 7-15 million suggest that technology in Italy in 1340 was at worst as good as that in the Roman period? (4)

2. Suppose that the emperor Augustus died in Rome on 1 July in the 41st year of his reign, and was succeeded by Tiberius. Suppose that archeologists find commercial documents in Cairo dated as follows:

   16 July, 41st year of Augustus
   26 July, 1st year of Tiberius

How long did it take for news of his death to get to Cairo? (2)

3. The climate of Europe is supposed to have been very warm in the years 1200-1350. Assuming this raised yields in agriculture, what would the effect have been on birth rates, death rates, wages and population in the long run, assuming that fertility behavior did not change. (6)

4. Mokyr in discussing the determinants of the rates of technological progress talks about the possibility that “path dependency” mattered. Explain briefly what “path dependency” is. (4)

LONG ANSWER

5. Explain why urbanization should be a good indicator of the real income per person in a society. What do urbanization figures suggest about economic growth in Europe between 1300 and 1700? Is this evidence consistent with other evidence on economic growth in countries such as England? (17)

6. Economists tend to assume that people have the same desires and motivations in all societies, but the wealth of societies differs because of differences in institutions that affect incentives. Historians tend to assume there are important differences in the desires and motivations of people in different societies.

   Based on the material you have seen so far in class, and in Mokyr’s book, which view fits pre-industrial Europe better? (17)
FIRST MIDTERM

1. Things are often not as they seem. Explain briefly which of the following statements are incorrect or misleading and which are true:

(a) The stirrup was unknown to the ancient Romans or Greeks. (2)
(b) Since the death rate was so high in the pre-industrial world deaths constantly exceeded births. (2)
(c) If you sued someone in a property dispute in England in 1300 they had the right to try the issue through personal combat. (2)
(d) In the eighteenth century most middle class mothers in towns in Scotland would send their newborns immediately to wet nurses in the countryside where most of them died. (2)
(e) Real incomes of laborers in England were higher in 1400 than they were in 1850 after the Industrial Revolution. (2)
(f) Since real incomes were higher in Europe in 1400 than in 1300 life expectancy must have been higher in 1400. (2)

2. (a) What are the three key assumptions of North and Thomas’s explanation of why technological change was so slow before 1700? (3)

(b) Briefly give two observations that are inconsistent with their theory. (2)

3. In 1600 11.4% of the population of Spain lived in towns of more than 10,000 people. By 1800 the proportion was still only 11.1%. What does this suggest about the movement of income per person in Spain over these 200 years? Explain the reasoning behind your answer in briefly. (3)

LONG ANSWER

4. Grain yields in medieval Europe were only in the order of 3 grains for every grain planted. Suppose that in 1300 people had discovered how to get 6 grains for every grain planted, but otherwise the technology of Europe before 1700 was unchanged. What would happen in the short run and in the long run to living standards, life expectancy, and population? (15)

5. “Money is the measure of all things.” Discuss using the evidence of medieval social institutions such as serfdom, the church and the legal system whether there is any evidence that people in medieval Western Europe cared any less about money, and were less prepared to make a deal to their mutual advantage, than people in modern America. (15)
SHORT ANSWER

1. (a) What (approximately) was the average age that men first married in pre-industrial Western Europe? (1)

(b) Suppose men delayed marriage by two years (but women did not change their behavior). What would happen in the long run to the death rate? (1)

(c) Suppose women married two years younger. What would happen in the long run to the death rate? What would happen to the population? (2)

(d) What approximately are the average number of children who survive to adulthood per woman in Italy now? What is the same figure for Saudi Arabia? For Europe before 1700? For China before 1700? (label your answers clearly) (4)

2. (a) Explain briefly why urbanization should be a good measure of average income levels in Europe before 1700. (2)

(b) Do the urbanization figures for England tell the same story for the years 1300-1700 as the figures on real wages? If not what is the difference? (2)

3. Suppose the share of capital, labor, and land in the value of output in an economy are each 1/3. Suppose that efficiency growth increases by 1%.

(a) What happens to the growth rate of output, and to the growth rate of output per person as an immediate effect of this increased efficiency growth? (2)

(b) If capital per person rises proportionately to income per person, what is the final effect of the increase in efficiency growth on the growth of output per person? (2)

4. What four features defined the open-field system? (4)

LONG ANSWER

5. Show that in the long run in a pre-industrial society life expectancy at birth depends only on the fertility rate. Explain carefully what assumptions your demonstration is based on. (15)

6. “All growth in incomes per person since 1700 have been created by investment in capital” Explain why someone might argue this. What are the weaknesses of this position? (15)
FINAL

SHORT ANSWER (30 points)

1. How is information on the dates of death of emperors used to determine the speed of travel within the
Roman empire? (4)

2. (a) What is the condition for it to be profitable for rational slave owners to encourage reproduction of
the slave stock? (Define any symbols used). (6)

(b) Why was this condition unlikely to be met in Ancient Rome? (4)

3. (a) What was the main reason Columbus found it hard to get financial backing for his plan to sail west
to Asia? (3)

(b) Could anyone have undertaken such a voyage 200 years earlier? Explain. (3)

(c) Why did the very large Atlantic slave trade between 1500 and 1825 fail to generate large profits
either for the slave shippers or the plantation owners in the New World? (2)

4. What evidence led de Vries to posit an Industrious Revolution in the 17th century in England and the
Netherlands? (2)

5. What four circumstances can lead to high rates of return on capital in a society? Do any of them
account for the high rates of return in medieval Europe? (6)

LONG ANSWER (70 points)

6. There was technological advance in Europe before 1700, but at a relatively slow pace. Explain why
this advance had little effect on living standards. What kept living standards relatively high in Europe? (25)

7. Explain how we can use the percentage of the population living in urban areas as a way of measuring
living standards. What does it imply for Europe from 1500 to 1700? (20)

8. Explain the various tests we can do to measure the efficiency and the extent of the market in grain in
medieval England. What do these tests show? (25)
SHORT ANSWER (40 points)

1. There are 5 things wrong with the following account. List them.

“The arrival of the Black Death in 1349 was an event that shaped European history for the next 300 years. The population fell, so that in England, for example, there were less than 2.5 million people in the whole country in 1450. In the plague years, since the number of people dying per year was so much greater than before, real wages rose to high levels. A carpenter in England in 1450 got paid more per day than a carpenter in 1850 at the end of the Industrial Revolution. The high wages paid to workers caused them to substantially reduce the number of hours they worked per year. This led to a number of labor saving innovations such as the windmill, the watermill, and the printing press. Fear of the plague caused the population to permanently flee the cities, so that by 1500 less than 10% of the population of Europe lived in towns.” (10)

2. There are 5 things wrong with the following account. List them.

“In 1492 Columbus led an expedition to claim the New World for Spain. Columbus had been denied backing for his expedition from the kings of England, France and Portugal, who accepted the church doctrine that the world was flat. But the Spanish monarchs had read Galileo’s treatise “De Mundum Magnum,” first printed in 1488, and knew the world was round. Columbus’s expedition was made possible by recent innovations in finance and technology in Europe. Financiers had just discovered that interest should be charged on loans, so the monarchs could borrow to finance the voyage. Navigators had recently worked out how to calculate latitude and longitude at sea. New construction techniques made ships more maneuverable, and bigger for a given crew size.” (10)

3. Suppose that a listing of the ages of 100 criminals in pre-industrial Europe showed the following age distribution.

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(a) What is the implied level of literacy? (3)

(b) Which one of the following is the group of convicts most plausible for the calculated level of literacy:

- convicted forgers in Paris in 1603
- thieves transported to Australia from England in 1780
- runaway servants in ancient Rome (2)

4. Suppose a bushel of wheat typically sells for 10/- in October and 11/- in November. Should farmers in 1300 sell their wheat in October or November? Would your answer change if the year was 1750? Explain briefly. (5)

5. What 3 assumption did North and Thomas make about the conditions under which technical progress occurs? (6)

6. What is the Habakkuk Thesis on technological change? Explain briefly. (4)

**LONG ANSWER (60 points)**

7. In all pre-industrial societies women had on average 2.0 children who survived to adulthood. Explain why this is true. Explain also what perverse effects this implied for attempts to improve the welfare of people in pre-industrial societies. (20)

8. “The experience of Europe between 1200 and 1700 shows that when religious and cultural ideas conflicted with economic profits, profits dictated what was done.” Is this correct? Explain. (20)

9. Explain the various tests we can do to measure the efficiency and the extent of the market in grain in medieval England. What do these tests show? (20)
SHORT ANSWER (40 points)

1. (a) What were the four features that characterized the European Marriage Pattern? (4)

(b) Which of the following countries exhibited this pattern in 1700. Sweden, Hungary, Romania, Russia, France, Italy. (3)

(c) In western Europe life expectancy at birth was about 30 before 1700. With unrestricted fertility what would life expectancy have been? Show your calculation. (2)

2. (a) How much of the value of European consumption in 1800 was imported from the rest of the world? (2)

(b) Would the loss of income to Europe from cutting off this trade have been more or less than your answer in (a). Explain. (4)

(c) What was the typical rate of return in the cross Atlantic slave trade? How did this compare to the rate of return on domestic industrial investment in England? Explain. (4)

3. (a) Explain briefly why we know that the number of Roman citizens around 1 AD was either 4 m or 12 m. (3)

(b) What was the typical speed of the travel of information between Rome to Cairo in the first three centuries AD? (2)

4. What is Chayanov’s Law, derived from studying Russian peasants just before the Russian Revolution? (3)

5. (a) What happened in England in 1642-9? Explain briefly. (3)

(b) What happened in England in 1688-9? Explain briefly. (3)

(c) Were the events of 1642-9, or 1688-9, perceived at the time by investors as being an important change? Explain briefly. (4)
6. Explain why we know there was little technological progress in England between 1250 and 1700. (3)

**LONG ANSWER (60 points)**

7. Why do some people believe there had to be an Industrious Revolution in England between 1250 and 1850? What does the empirical evidence show? (20) (10 points for each part).

8. The key to the emergence of the modern world was the arrival of technological progress. Economists typically believe that the explanation of the absence of much technological change before 1700 must be a lack of material incentives. Explain why economists believe that, and discuss whether there is any evidence of such a problem in England between 1200 and 1700. (20)

9. Medieval agriculture had very low grain yields. This has typically been taken as a sign that cultivators were using primitive techniques.

Discuss what the apparent cause of these low yields was, and explain why that makes it a puzzle that medieval cultivators did not take steps to improve yields. Explain how the low yields may actually have been a profit maximizing decision. (20)
SHORT ANSWER (40 points)

1. Some of the following statements are false, some true. Identify which are true and false, and explain briefly why those which are false are so:

(a) If the capital stock growth rate is increased by 1% then income per capita would grow by more than 1% more. (2)

(b) The rate of return in Germany prior to the Black Death was as high as 8%. (2)

(c) Faster growth of population in a country in the modern world does not depress the growth rate of income per person. (2)

(d) Population rose rapidly in England after 1770 mainly because there were more illegitimate births. (2)

(e) The European economy in 1300 was a Malthusian one because the technology was very primitive. (2)

(f) People did little work in medieval England because of the large numbers of Saints days observed. (2)

(g) The rate of return on capital in medieval Europe was high because of the lack of growth of incomes. (2)

(h) Arable land was much more valuable than pasture in the pre-industrial economy because of the great shortage of animals. (2)

(i) At a 10% rate of return $100 invested now will be worth more than $11,000 in 50 years time. (2)

(j) The Greeks knew the circumference of the earth because they had observed that the moon just covered the sun in solar eclipses. (2)

2. 12.4% of the population lived in towns in Italy in 1500, and 14.4 percent lived in towns in 1800. Comment. (5)
3. Suppose that a sheep graze in a common pasture. All villagers can put as many sheep in the
wood as they wish. The annual cost of a sheep to the owner is $8. The total amount of output
the sheep generate is given (in $) by

\[ Q = 40Z - 4Z^2, \]

where \( Z \) is the number of sheep.

(a) At what number of sheep is total output maximized? (1)
(b) What is the actual number of sheep that graze the pasture? (1)
(c) What is the efficient number of sheep in the pasture? (2)
(d) How must property rights be reformed to get the efficient number of sheep? (2)

(show calculations)

4. “Real incomes in Europe in 1400 were 80% higher than in 1300. Death rates depend on real
incomes. Consequently life expectancy in 1400 must have been much higher than in 1300.”
Comment. (4)

5. What is Chayanov’s Law, derived from studying Russian peasants just before the Russian
Revolution? (3)

6. What happened to the interest rates on government debt after the Glorious Revolution? (2)

**LONG ANSWER (60 points)**

7. What is the Postan thesis? Explain its connection to high medieval interest rates. (20)

8. North and Thomas argue that the key cause of the failure of the European economy to grow
before 1700 was bad institutions. Explain their argument. Does the evidence from pre-industrial
Europe suggest that societies tend to get stuck with poor institutions? (20)

9. Explain the impediments historians believe limited the operation of grain markets in medieval
Europe. In actual practice did these impediments limit the market much? Explain. (20)